

PROFESSIONAL DEVELOPMENT OPPORTUNITY  
National Park Service  
U.S. Department of Interior

MIDWEST ARCHEOLOGICAL CENTER

*Current Archeological Prospection Advances  
for Non-destructive Investigations in the 21st  
Century*

May 16-20, 2005

**LOCATION:** Hopewell Culture National Historical Park  
Chillicothe, Ohio

**DESCRIPTION:** This workshop is designed to provide a practical application of geophysical equipment and aerial photographic techniques available for the identification, evaluation, and ultimately, the conservation and protection of cultural resources. The field exercises associated with the course will concentrate on the application of these techniques to archeological investigations. Instruction will be given in the use, processing, and interpretation of data from magnetometers, conductivity meters, resistivity meters, ground penetrating radar, metal detectors, and magnetic susceptibility and their applications to non-destructive subsurface investigations. The major emphasis of the training will be on the field use of the equipment. Special topic for this year is the introduction of geophysical techniques in archeological excavations. Instruction will also be offered in the use of and interpretation of aerial photographic techniques, and in the use of low altitude large scale aerial reconnaissance.

Geophysical techniques provide a means of non-destructive investigations for archeological surveys. Geophysics utilizes physical principles to study the earth through indirect interpretation of the earth's physical properties. Geophysicists to interpret the earth's physical characteristics use physical, electrical, and/or chemical measurements. Active geophysical techniques are based on responses from an induced signal used to detect contrasts in different material properties. Such techniques include **electromagnetics (EM)**, **ground penetrating radar (GPR)**, **metal detectors**, **electrical resistivity**, and **seismic**. Passive techniques are based on responses from the natural conditions. These techniques include **magnetics**, **gravity**, and **self potential (SP)**. Participants will be provided an opportunity to use the following geophysical survey techniques including magnetics, electromagnetics, ground penetrating radar, resistivity, and metal detection. The course will provide an opportunity to learn about non-destructive geophysical techniques for archeological investigations including advantages and disadvantages of such techniques.

**PARTICIPANTS:** Federal, State, and Local governmental cultural resource managers and specialists (i.e., archeologists, historians, architects, and contracting personnel) as well as private contractors, university professors and students, and international cultural resource personnel, with specific responsibilities concerning the identification, evaluation, conservation, protection, and management of archeological and other cultural resources across the nation. **Due to limitations of space, participation in the workshop is limited to 50 participants.**

**POTENTIAL INSTRUCTORS:** Course instructors in the past have included Dr. Lewis Somers, Geoscan Research USA; Dr. Bruce Bevan, Geosight; Mr. Jule Caylor, USDA Forest Service; Dr. John Weymouth, University of Nebraska; Mr. James W. Walker, Brigham Young University; Mr. G. Clark Davenport, Geoforensics International; Dr. Rinita Dalan, Minnesota State University; Dr. Dean Goodman, Geophysical Archaeometry Laboratory, Dr. Douglas Scott, Midwest Archeological Center; Dr. Kenneth Kvamme, University of Arkansas; Dr. Larry Conyers, University of Denver; and Dr. Berle Clay, Cultural Resource Analysts.

**COURSE DATES:** The workshop is planned for May 16-20, 2005. Additional information on the workshop and lodging is available from the National Park Service (Steven De Vore, Course Coordinator--phone: (402) 437-5392, ext. 141). Lodging and lectures will be at the Comfort Inn in Chillicothe with field exercises conducted at Hopewell Culture National Historical Park.

**APPLICATION:** There is a \$475.00 charge for course tuition. Non-Government personnel complete the attached nomination form and send a check or money order to the National Park Service, Midwest Archeological Center, ATTN: Steven De Vore, Federal Building, Room 474, 100 Centennial Mall North, Lincoln, Nebraska 68508-3873. Checks/money orders must be payable to the National Park Service. Federal personnel complete the attached nomination form and send to the address mentioned above. Please submit a 10-part SF-182 Training Form through your local Training Office. All nomination forms must be in by **COB April 22, 2005**. Participants will be notified by April 29, 2005, as to their acceptance to the workshop. Questions should be directed to Steven De Vore at (402) 437-5392, ext. 141).

## APPLICATION FORM



Send form and check to National Park Service, Midwest Archeological Center, ATTN: Steven De Vore, Federal Building, Room 474, 100 Centennial Mall North, Lincoln, Nebraska 68508-3873. Make check in the amount of \$475.00 payable to the National Park Service.

**Name:** \_\_\_\_\_ **PHONE:** \_\_\_\_\_

**Address:** \_\_\_\_\_

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\_\_\_\_\_

**Email:** \_\_\_\_\_

**City:** \_\_\_\_\_ **State:** \_\_\_\_\_ **Zip:** \_\_\_\_\_

**Title/Position:** \_\_\_\_\_

**Course Title:** Current Archeological Prospection Advances for Non-destructive Investigations in the 21<sup>st</sup> Century

**Course Dates:** May 16-20, 2005  
(see back)

**WHY I FEEL THE TRAINING IS BENEFICIAL TO ME (AND TO THE  
GOVERNMENT/ORGANIZATION):**

**WHY THE SUPERVISOR FEELS THE TRAINING IS BENEFICIAL TO THE  
EMPLOYEE (AND THE GOVERNMENT/ORGANIZATION) IN THE PERFORMANCE  
OF HIS/HER JOB:**

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Immediate Supervisor

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Date

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Agency Chief/Departmental Supervisor

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Date